

WP 05-WH1403

Revision 10

3-Ton Electric Forklift 41-H-009

Technical Procedure

EFFECTIVE DATE: 11/14/19

Gary Chism
APPROVED FOR USE

THIS DOCUMENT IMPLEMENTS REQUIREMENTS FOR THE HWFP.

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CHANGE HISTORY SUMMARY

REVISION NUMBER	DATE ISSUED	DESCRIPTION OF CHANGES
9	09/10/19	<ul style="list-style-type: none">• Corrected Step 5.1.4.• Updated JHA number, title, and affected Precautions.• Corrections throughout to match current Permit language and conventions.
10	11/14/19	Minor change. <ul style="list-style-type: none">• Added Precaution, bullet 10 and Limitation, bullet 2.

1.0 INTRODUCTION

1.1 PURPOSE

This procedure provides instructions for preoperational checks of the 3-Ton Electric Forklift (41-H-009).

1.2 SCOPE

All procedure actions are performed by qualified WH personnel or workers under the direct supervision of a qualified individual.

Performance of this procedure, or selected selections of the procedure, implements inspection requirements of the HWFP relative to the scope of, and as defined in, this document.

1.3 RECORDS

Records generated are handled per departmental Records Inventory and Disposition Schedules. Performance of this procedure generates the Equipment Logbook.

2.0 REFERENCES

DOCUMENT NUMBER AND TITLE	BASELINE DOCUMENT	REFERENCED DOCUMENT	KEY STEP
40 CFR 264.15, General Inspection Requirements	✓		
DOE Standard 1090-2011, Hoisting and Rigging	✓		
Hazardous Waste Facility Permit, EPA Identification Number NM48901388-TSDF	✓		(\$)
41-H-009, CLARK Operator's Manual	✓		
WP 04-AD3011, Equipment Lockout/Tagout	✓		
WP 04-AD3016, Equipment Out of Service Process		✓	
WP 05-WH1101, CH Surface Transuranic Mixed Waste Handling Area Inspections		✓	
WP 13-1, Nuclear Waste Partnership LLC Quality Assurance Program Description	✓		
WP 15-GM1002, Issues Management Processing of WIPP Forms		✓	
05-WH1403-JHA, General Forklift Operations	✓		

2.1 ABBREVIATIONS AND ACRONYMS

AR	action request
CH	contact-handled
CMRO	Central Monitoring Room Operator
HVAC	heating, ventilation, and air-conditioning (system)
HWFP	Hazardous Waste Facility Permit
OOS	out of service
RWP	Radiological Work Permit
SEC	Site Environmental Compliance
WH	Waste Handling
WHE	Waste Handling Engineer
WIPP	Waste Isolation Pilot Plant

3.0 PRECAUTIONS AND LIMITATIONS

3.1 PRECAUTIONS

- Preoperational checks are required prior to first operation of the forklift for each calendar day of use. **[HWFP Table E-1]**
 - Mechanical operability
 - Leaks/spills
 - Deterioration
 - On-board fire extinguisher
 - Path clear of obstacles
 - Guards in proper place
- Eye, foot, head, and hand hazards exist when installing or removing battery nip or when spotter is placing long or short legs on MgO racks. Personnel are to wear leather (mechanics) gloves, safety hat, and hard-toed shoes.
- Forklift use hazards exist when spotting heavy equipment. Personnel are to operate on surfaces suitable for travel and spotter is to wear high visibility vest or gloves.
- Moving/falling objects hazards exist while moving material or equipment. Personnel are to stand clear of load.
- Pinch point hazards exist for the spotter when placing long or short legs on MgO racks. Personnel are to wear leather (mechanics) gloves and exercise situational awareness.

REFERENCE USE

- Radiological hazards exist when moving waste in CH Bay. Personnel are to read and sign the RWP.
- Slip or trip hazards exist during general operations. Personnel are to maintain good housekeeping and practice situational awareness.
- Vehicle traffic and heavy equipment hazards exist during general operations. Personnel will adhere to surfaces suitable for travel.
- Biohazards can be present when using the forklift. If bit or stung by a desert animal or insect, CMR, Health Services, or Emergency Medical Technicians shall be contacted.
- Lack of ventilation hazards exist when charging batteries. Personnel are to verify ventilation is operable.

3.2 LIMITATIONS

- The rated load carrying capacities of the forklift, listed below, must not be exceeded:
 - Forks: 5,700 lbs at 24-inch load center
 - Drum handler: 4,000 lbs at 60-inch load center
- Prior to charging batteries in the TRUPACT Maintenance Facility, verify HVAC system is operable.

4.0 PREREQUISITE ACTIONS

4.1 **REVIEW** Equipment Logbook for outstanding deficiencies and ARs.

4.2 **IF** forklift battery is charged and still on the battery charger,
THEN PERFORM the following to disconnect forklift from charger:

4.2.1 **ENSURE** battery charger is OFF.

4.2.2 **DISCONNECT** battery charger power cable from battery power plugs.

4.2.3 **CONNECT** battery power plugs to forklift power plugs.

4.2.4 **RECORD** name, date, and time forklift was removed in Equipment Logbook.

HWFP 5.0 PERFORMANCE [HWFP Table E-1]**5.1 PREOPERATIONAL CHECKS**

5.1.1 **COMPLETE** Attachment 1, 3-Ton Electric Forklift 41-H-009 Preoperational Checks.

5.1.2 **NOTIFY** WHE of operational status, deficiencies discovered, and status of each.

[A] **IF** deficiencies cannot be corrected when discovered, **THEN INITIATE** an AR.

5.1.3 **RECORD** the following information in Equipment Logbook:

- Deficiencies found
- Procedure number
- Equipment number
- Hour meter reading
- Check SAT or problems noted
- AR(s), if newly initiated or outstanding
- Date, time, and signature to document performance of preoperational check

5.1.4 **IF** preparing for CH Waste Handling Mode, **THEN GO TO** WP 05-WH1101, CH Surface Transuranic Mixed Waste Handling Area Inspections, and **COMPLETE** Attachment 4, TP-II Preoperational Surface Waste Handling Mode Checklist, 3-Ton Forklift section.

5.1.5 **IF** an HWFP required inspection becomes delinquent or failed
THEN PERFORM the following:

[A] Immediately **NOTIFY** on-call SEC Representative and CMRO of delinquent or failed inspection.

[B] **RESCHEDULE** and **COMPLETE** required inspection.

[C] **DOCUMENT** the following, and **SUBMIT** to PermitInspections@wipp.ws within five working days:

- Inspection document number
- Description of facility, equipment involved
- Schedule for inspection
- Reason(s) why inspection was not performed or failed
- Compensatory measures taken to offset negative impacts from not performing the inspection or equipment not providing its intended function
- Actions to prevent further delinquencies

[D] WHE, **GO TO** WP 15-GM1002, Issues Management Processing of WIPP Forms, and **ENSURE** a WIPP form is generated.

HWFP (\$) Attachment 1 – 3-Ton Electric Forklift 41-H-009 Preoperational Checks
[HWFP Table E-1]

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NOTE

Deficiencies corrected when discovered are considered satisfactory.

	INSPECTION	CRITERIA	SAT	UNSAT	NA
1.	General Condition Checks	NO deterioration/damage, which includes visible cracks, erosion, salt build-up, corrosion, malfunctions, and structural deterioration	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		NO loose parts	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		NO oil leaks, if leak is identified, refer to Attachment 2, Leak Categorization	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		NO grease	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		NO trash	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		ENSURE ground strap attached	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.	Tires/Wheels/ Brakes	ENSURE tires are in good condition; not excessively worn or cracked	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		ENSURE accessible wheel lugs installed and hand tight	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		ENSURE brake pedal has 2-3 inches of free play - readily felt by hand	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		ENSURE brake pedal is not springy or spongy and does not stick or bind when pressed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		ENSURE parking brake does not bind when set or released	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.	Battery Compartment	ENSURE compartment is free of acid spills/leaks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		NO loose or missing caps or cables	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.	Fire Extinguisher	ENSURE fire extinguisher is charged and inspection is up to date	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.	Hydraulic System – checked with forks or attachments lowered to the floor	ENSURE reservoir level is at or above the ADD mark	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		NO leaks from hoses, couplings, or fittings	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6.	Upright and Lift Chains	NO obvious wear, damage, or missing parts	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		NO slack or broken chains	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

HWFP (\$) Attachment 1 – 3-Ton Electric Forklift 41-H-009 Preoperational Checks
[HWFP Table E-1]

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	INSPECTION	CRITERIA	SAT	UNSAT	NA
7.	Forklift Attachments	NO obvious cracks, breaks, bends, twists, or wear	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		ENSURE forks are correctly installed and locked in the proper position	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8.	Forklift Start/ Operating Checks	SIT in seat, VERIFY that the seat belt is in good condition, and FASTEN the seat belt	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		ADJUST seat to provide easy access to all controls	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		ENSURE seat locking mechanism locks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		ADJUST steering wheel tilt for easy access to all controls	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		ENSURE directional control lever is in NEUTRAL	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		ENSURE hoist control lever is in NEUTRAL	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		ENSURE tilt control lever is in NEUTRAL	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		ENSURE fork position lever is in NEUTRAL	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		ENSURE side shift lever is in NEUTRAL	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		PRESS service brake pedal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		TURN key ON to start forklift	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		Immediately INVESTIGATE any unusual noises	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		ENSURE battery charge indicator shows adequate charge for operation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		VERIFY horn sounds	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		VERIFY front lights illuminate	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		VERIFY back lights illuminate	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		VERIFY hoist control raises and lowers forks or attachment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		VERIFY tilt control tilts forks/attachment forward and backward	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		VERIFY side shift control operates forks left and right	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		VERIFY fork position control operates forks in and out	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

HWFP (\$) Attachment 1 – 3-Ton Electric Forklift 41-H-009 Preoperational Checks
[HWFP Table E-1]

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	INSPECTION	CRITERIA	SAT	UNSAT	NA
9.	Brakes / Operating Checks	RAISE forks 6-10 inches above the floor	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		ENGAGE the parking brake	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		RELEASE service brake pedal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		Attempt to MOVE forklift forward and backward ensuring forklift does not move in either direction, if applicable	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		RELEASE the parking brake	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		Using directional control lever, SELECT a direction to travel	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		PRESS the accelerator pedal and MOVE forklift	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		VERIFY forklift steering operates smoothly and does not pull to the right or the left	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		VERIFY brakes are in good condition and do not drag	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		VERIFY backup alarm is operational while moving in reverse	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		VERIFY that seat brake engages when operator rises from seat	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		VERIFY brake lights illuminate, when pedal is pushed, if applicable	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		STOP forklift	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		SET parking brake	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10.	Drum Handling Attachment	VERIFY NO obvious cracks, breaks, bends, twists, or wear exists	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		INSTALL drum handling attachment on forks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		ENSURE safety chain is installed around the load backrest	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Attachment 2 – Leak Categorization

	TYPE 0	TYPE 1	TYPE 2	TYPE 3	TYPE 4
Indications:	No indications of moisture—dry	Dampness around hoses or engine compartments, including oil sheen	Dripping from a hose	Spraying from a hose or oil running down firewall, etc.	Ruptured hose (e.g., oil line, fuel line)
Status	Operational		DO NOT OPERATE		
Required Actions:	None	RECORD leak Type 1 and the source of the leak in Logbook	[A] TAG equipment OOS with an OOS Tag per WP 04-AD3016, Equipment Out of Service Process. [B] SUBMIT AR for repairs. [C] RECORD leak type and AR number in Logbook. [D] WHEN repairs and cleanup are completed, THEN the equipment can be put back into service.		